"John Kennington " <jkennington @utah.gov>
04/12/2012 12:22 PM

To Elaine Lai
cc "John Whitehead", "Matthew Garn", "Mike Herkimer"
bcc
Subject Re: Example UT NPDES Permit for Oil and Gas?

Elaine,

These three permits are very old, and the treatment technology for the one discharge location that is operating consists of an oil/water separator and three settling/skimming ponds. I suspect the O/W separator is intended for the company's use to roughly separate the product oil from the oily wastewater; and the three ponds were put in as a standard treatment for the oily water, to meet our discharge standards.

As I mentioned earlier for disposal we are most encouraging re-injection into the same dirty underground reservoir from which the water came, or evaporation from total containment ponds. We also are discouraging any use for land application, like road dust control, as we're wary of encouraging the spread of an oily mess. We are, however, allowing the treated water to be used for private land agricultural irrigation, on a limited basis.

-j

>>> Elaine Lai <Lai.Elaine@epamail.epa.gov> 4/12/2012 10:48 AM >>>

Thanks, John, for sending these. They are insightful. I had a quick question - you mentioned that the three individual UPDES permits are for treated produced water - what kind of treatment is being done to the produced water - or did you mean treatment as part of the heater treater? I am also curious whether the decision to treat produced water was a decision by the utility, or a requirement from the state? Thanks for any clarification here - It is insightful as we try and get our arms around some issues we are dealing with on the Wind River Reservation in WY with the discharge of untreated produced water to surface.

"John Kennington" ---04/11/2012 11:07:16 AM--- Hi Elaine,

From: "John Kennington" <jkennington@utah.gov>
To: Elaine Lai/R8/USEPA/US@EPA
Cc: "John Whitehead" <JWHITEHEAD@utah.gov>, "Matthew Garn" <mgarn@utah.gov>, "Mike Herkimer" <mherkimer@utah.gov>
Date: 04/11/2012 11:07 AM
Subject: Re: Example UT NPDES Permit for Oil and Gas?

Hi Elaine,

In response to your questions about how we handle produced water from perto/gas wells:

Presently we have three individual UPDES permits (UT0000035, UT0000124, UT0021768) issued to one company (Western Energy, Inc.) to cover discharges of treated produced water from three oil well facilities that are located close to each other in Uinta County. The discharges have been combined to utilize the discharge point for UT0000035 only (ie the other two are inactive). These permits were issued many years ago and the discharge from 35 has presented significant problems over time due to the apparent nuisance conditions created by the nature such discharges. Presently our sister agency, the Utah Division of Oil, Gas and Mining (DOGM), who regulates these facilities, is in the process of transforming the mode of disposal of this facility to well re-injection, so that these permits may not be needed in the future. Permit UT0000035 and its SOB are attached below.

Since their issuance long ago, DOGM has fortunately been able to manage the later discharges from the many oil/gas wells in the state by requiring the produced water to be disposed of in 'total containment' lagoons or by re-injection back into the well field. As a result, we have no other such permits, and no general permit for the purpose of regulating surface water discharges of the treated produced water. We feel that these modes of management, of all the treatment/disposal processes that have been proposed so far, result in the least impact on the environment and the lowest hassle factor for everyone involved, and encourage this type of disposal management wherever possible. On occasion we have received inquiries regarding surface water disposal, but they have not developed, as it appears it has not been cost effective to meet our discharge standards. The recent Kleinfelder inquiry referred from Colleen G. being the latest of those inquiries.

One exception to all this is a new project that is in the permit development stage for the Westwater Farms Produced Water Recovery Plant, to be located along I-70 near Exit 227 and the Colorado border. This project will involve the collection, treatment and discharge of produced water from several wells in the area. The effluent will be highly treated in a multi-step process including carbon filtration and 2-stage reverse osmosis. What effluent is not re-used in the treatment process will be discharged to a local stream. The very highly treated effluent will meet stringent quality limits.

Hopefully I have adequately answered all of your questions. Please respond if you need more information.

Best Regards,

-John

>>> Elaine Lai <Lai.Elaine@epamail.epa.gov> 4/9/2012 2:12 PM >>>

Good Afternoon John-
I just wanted to follow up with my voicemail I left earlier this afternoon about my interest in getting a sense on how each of our states our addressing NPDES permitting for conventional oil and gas facilities and their discharge of produced water. Could you please send me an example permit

and SOB for both an older facility that is discharging to meet water quality criteria , as well as a newer facility? If at all possible, I would be also interested in seeing a permit that includes WET monitoring and/or WET limits. This will be helpful as we work through our oil and gas permitting in Indian Country as well as in helping us get a sense of how NPDES for oil and gas is being addressed regionally.

Thanks
Elaine
303-312-7041[attachment "WEO Compl Ltr 121911.DOC" deleted by Elaine Lai/R8/USEPA/US]
[attachment "WEO 035 SOB 2009.DOC" deleted by Elaine Lai/R8/USEPA/US]